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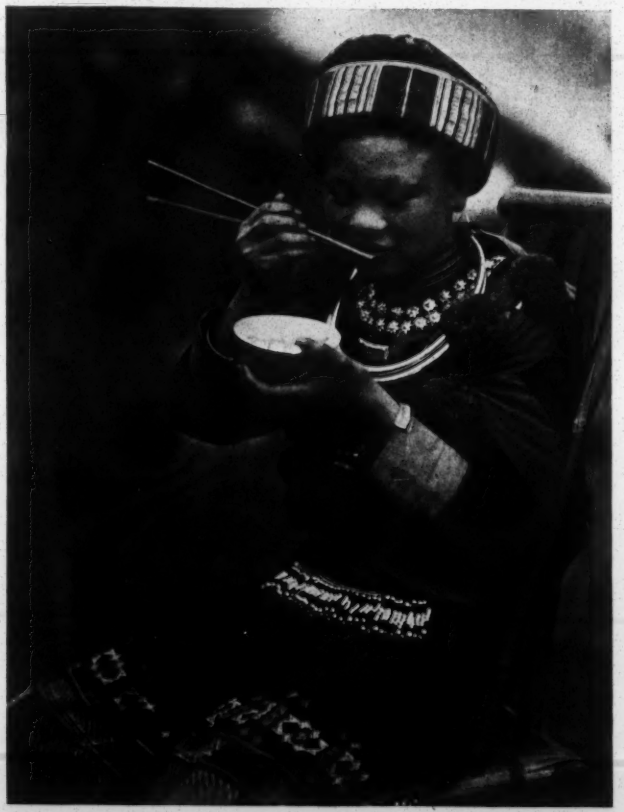

MAYNARD OWEN WILLIAMS

CHOPSTICKS AND RICE SHOW CHINA'S INFLUENCE IN THE LAND SOUTH OF THE BORDER

This tribal girl of the Tonkin hill country of French Indochina (Bulletin No. 1) eats the usual food of her country—rice—with chopsticks, the "place setting" borrowed from China.

Bulletin No. 1, March 7, 1949

French Indochina Forms Tropical Crossroads

ATTEMPTS of the French and the ex-emperor of Annam—Bao Dai—to agree on the government of French Indochina concern the future of a tropical crossroads land. Neighboring China, Burma, and Siam are reflected in Oriental traits, and Occidental overtones emphasize the influence of far-away France.

Although French missionaries arrived in Indochina in 1610 and explorers and traders followed in their wake, it was not until after the middle of the 19th century that this corner of southeast Asia was brought within the French Empire.

Shoreline Follows Giant S Shape

Of the five units of France's richest overseas territory, Cochin China was first to come under French rule. From the time of its annexation in the 1860's until it became an autonomous republic in 1946, Cochin China was a colony of France. Annam, Cambodia, Laos, and Tonkin were protectorates. Kings ruled in Annam, Laos, and Cambodia.

With an area greater than that of Texas, French Indochina occupies the eastern part of the Indochinese peninsula. Shaped somewhat like an irregular S, it arches up into China on the north and its southern shores curve into the South China Sea northwest of Borneo and the Philippines. Siam projects a rectangular extension into the country on the west.

On the northwest, the frontiers of Burma, China, French Indochina, and Siam interlock in picture-puzzle fashion. French Indochina's nearly 25,000,000 people are linked by blood strains and cultures with these neighbors. Three-quarters of the population is Annamese. The French—of whom there were about 40,000 before the war—supervised the trade with Europe but local commerce was largely in the hands of the Chinese.

Population Densest along Rivers

The Chinese owned about 90 per cent of the rice mills and controlled the trade in corn and pepper. All these products are important on Indochina's export lists. Practically the only pies in which the Chinese did not have fingers were mining and rubber growing.

Though 90 per cent of the population is rural, there is little level land. Most of the people live along the deltas of the two great rivers—the Red, which cuts through the center of Tonkin from China's Yunnan Province, and the Mekong, one of Asia's longest rivers, which flows the entire length of the country to its delta in Cochin China.

In the north coal, iron, manganese, and zinc are mined. The cement industry was also important in this region. Before the war about 150,000 tons were annually exported to near-by countries.

The central coastal region is mainly agricultural, with tea, corn, sugar cane, and cinnamon flourishing. South Indochina, including Cochin China, is one of the world's great rice-growing areas. Crops not only furnish the nation with its staple food (illustration, cover) but provide its chief ex-

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AP FROM PRESS ASS'N

AS PARICUTÍN ROARS NEAR BY, FRIGHTENED VILLAGERS CLUSTER BEFORE THE CHURCH

Fine ash from the volcano (Bulletin No. 5) covers everything within miles. A pile of it (center) has been swept from the roof of this church in Parangaricutiro, Mexico. The tall poles are for fireworks during festivals.

Congo Drum-Telegraph Replaced by Radio

RADIO, the "white man's tom-tom," has moved into the African jungle. When future travelers in Belgian Congo hear the throb of a distant drum, more than likely they will find it accompanied by the wail of saxophones playing at some London or New York dance.

A new radio service for the natives of Belgian Congo has been inaugurated in six local dialects, under the direction largely of native announcers and technicians. It puts the old tribal drums in the horse-and-buggy class.

Each Blow a Syllable

The modern news carrier will be faster and simpler than the traditional jungle telegraph. But foreign visitors will miss the romantic and mysterious booming of drums that used to transmit messages from village to village (illustration, next page).

Drum communication has a language all its own, with each blow representing a spoken syllable. Drummers spotted at five- or six-mile intervals can transmit messages over great distances with surprising rapidity and accuracy.

The drum itself, hollowed from a convenient hardwood tree, is usually limited to two tones, the result of cutting the wood thicker on one side than on the other. The two tones, however, manipulated by expert drummers, can "spell out" complex messages.

The trick lies partly in the poetic vocabulary used, according to travelers. Since spoken words translated into only two tones would often sound the same, drummers developed a system of substituting descriptive phrases. Instead of saying simply that it was going to rain, the announcer would beat this oracular warning: "Badman, son of disease, is coming down on clods of earth."

Dialects Limit Communication

Many an early explorer, coming into an African settlement, found to his amazement that news of his arrival had preceded him. One Congo traveler, wishing to test the accuracy of tom-tom communiqués, sent a request for a supply canoe to be dispatched from a village on the far shore. After the canoe had started, he sent a second message, asking it be recalled for more men and more goods. This was promptly done, and the items of request were filled.

Although long-distance drumming is limited in range by the boundaries of local dialects, the native telegraph has been widely used in central Africa for countless decades. Villages along the river banks found it particularly useful since sound carries better over water—up to 10 miles with clarity.

Separated tribes could talk and carry on wordy quarrels with one another by drum systems. Tom-toms have been known to end wars and make peace settlements. Neighboring tribes often advised their hunters

port. In 1939 nearly 1,700,000 tons were exported from Saigon. Corn was another major export from this region, and about 69,000 tons of rubber were shipped out in the last year before the war.

To this country of bamboo huts and gilded temples, stiff classical dancers and elephant pageants, French administrators brought patches of European civilization in the form of modern buildings, roads, schools, and hospitals. In Hanoi, prewar capital, dwellings, outdoor cafes, and dress styles followed Paris ways as closely as time and conditions would permit. In sharp contrast are narrow old streets named for the artisans whose shops border them. Hanoi had about 140,000 residents in 1945.

Saigon, chief port, capital of Cochin China, and postwar seat of the French government, had a prewar population of about 190,000.

After the war, and a series of clashes with French troops, nationalists set up a republic called Viet-Nam, with its capital at Hanoi. French authorities have recognized this republic, which includes Tonkin and Annam, as a "free state within the Federation of Indochina and the French Union." The Republic of Cochin China also has been so recognized, and certain autonomous privileges within the colonial empire have been conceded to the kings of Laos and Cambodia. Boundaries of the new states and their rights and powers, however, are still unsettled.

NOTE: French Indochina is shown on the National Geographic Society's Map of Southeast Asia. Write the Society, Washington 6, D. C. for a price list of maps.

See also, "By Motor Trail Across French Indo-China," in the *National Geographic Magazine* for October, 1935; and "Strife Still Rules in French Indochina," in the GEOGRAPHIC SCHOOL BULLETINS, January 19, 1948.

MAYNARD OWEN WILLIAMS

FRENCH FASHIONS HAVE NOT INFLUENCED EITHER COSTUME OR CRAFT IN THIS QUIET BACKWATER OF HUÉ, ANNAM'S CAPITAL

Bulletin No. 3, March 7, 1949

Alpine Lands in South Austria Disputed

REPRESENTATIVES of the United States, Great Britain, France, and the Soviet Union, meeting in London to discuss a peace treaty for Austria, have been confronted with an old Austrian boundary problem. Yugoslavia, backed by Russia, has renewed claims to border areas in Carinthia and Styria where the population is part Germanic and part Slavic.

At stake is a picture-post-card land of magnificent Alpine scenery (illustration, next page) along the southern edge of Austria. In fact, a 19th-century citizen of Klagenfurt, capital of Carinthia, has been credited with the invention of the post card. Few places in the world have offered more incentive in pictorial subjects.

First Disputed after World War I

Medieval castles rise on Carinthia's mountain crags. White sails dot blue mountain lakes. Green wooded valleys give way to glistening glaciers. The mountain fastnesses culminate in Gross Glockner (big bell ringer), a peak that lifts its cloud-crowned head well over two miles above sea level.

Facing Italy and Yugoslavia along a 150-mile frontier, the Carinthian region became an international problem after World War I. In the reorganization of Europe, newly formed Yugoslavia claimed Carinthia as part of the Slavic territories held by the Austro-Hungarian Empire.

The dispute was settled in favor of Austria, as the result of a plebiscite by the Carinthian inhabitants nearest to the Yugoslav border. By this vote, Austria retained nearly all of Carinthia, a province about the size of Connecticut. Tiny portions, less than 150 square miles each, went to Italy and Yugoslavia.

Carinthia, however, especially in its southern districts, remained a frontier area of mixed racial customs, costumes, and languages. Figures concerning the Slav proportion among its nearly half-a-million people vary greatly—from 50,000 to considerably more than 100,000.

Klagenfurt a Manufacturing Center

Between the two world wars, winter and summer vacationists poured into the lake and mountain resorts. They fished, hunted, and climbed the mountains. They visited hill-clinging villages at festival time, took ski jumps, and rested at medicinal spas. They swam in the remarkably warm Alpine lakes.

In fertile valleys and lowlands, Carinthia raises grain, vegetables, and fruits. It mines iron, lead, zinc, and other raw materials that help support such manufacturing towns as Klagenfurt, with its electrical, automotive, tool, and textile industries.

During the Nazi war regime, Carinthian economy was cut to German patterns. Wheat output, for instance, was curtailed in favor of other crops considered more essential in Germany's expanding orbit. Dairy cattle were shipped away for meat.

The province's forests were depleted to supply wood pulp for indus-

where game could be found. Frequently missionary headquarters communicated by drum with their followers in outlying villages or with their herdsmen in more distant fields.

As world travel and colonization spread, even the most remote peoples are becoming aware of such white man's "magic" as radio, refrigeration, and electricity. With fascination, they crowd around the visitor's "houses that move themselves"—the trailer caravans. With less and less awe, they inspect the electric lights that "go and come at the white man's will, and burn without smoke." Tentatively they touch the blocks of clear cold "stone" (ice cubes) that came from running water; listen to the box that carries songs, and stand happily before the whirring fan machines that make warm air into cooling breezes.

NOTE: Belgian Congo is shown on the Society's map of Africa.

For further information about this region, see "We Keep House on an Active Volcano," in the *National Geographic Magazine* for October, 1939; "Trans-Africa Safari," September, 1938*; and "Keeping House on the Congo," November, 1937. *(Issues marked with an asterisk are included in a special list of Magazines available in packets of ten for $1.00.)*

AN EXPEDITION LEADER STOPS IN BELGIAN CONGO TO SEND A MESSAGE VIA SIGNAL DRUM

The instrument looks like a log lying on the ground (center). The native operator stands with drumsticks poised ready to transmit. These Africans call their drum a goudougoudou. They made it by hollowing out a section of log through a large slot drilled near the top and a smaller one at the side. The goudougoudou is always placed in front of the chief's house at the center of the village.

Bulletin No. 4, March 7, 1949

New York's Red Oak May Join State Tree List

SHALL *Quercus borealis*—the stately red oak—be New York's official state tree? The legislators at Albany have been asked to say "yes" by statute.

America's 48 states, like the nation itself, have their individual flags and seals. Each has, or has had, an inspirational motto. Officially or unofficially, each state has its flower, its bird, its hymn of provincial praise, and a nickname or two.

School Children Selected Rhode Island's Maple

Trees now form a growing list of such symbols of state pride. Although 46 states are represented in the latest list of state trees compiled by the United States Forest Service, only 23 of the choices have state laws supporting them. Among the latest official adoptions are New Hampshire's white birch, Tennessee's yellow poplar, Washington's western hemlock, and Wyoming's cottonwood.

The unofficial tree slections have been made by forestry groups, by garden and women's clubs, and even by vote of school children. Rhode Island's official adoption of the maple tree followed its choice by students in 1894. Idaho lawmakers in 1935 approved the white pine, gallantly confirming the choice of a women's club in one of the state's tiniest counties.

Rhode Island's student vote was one of earliest state tree selections. Other pioneers in taking legal action were Illinois and Texas. The former passed its statute naming the "native oak" in 1908. Texas, producer of one-fourth of the nation's big pecan crop, adopted the pecan tree in 1919. Virtually all other legal actions have been since 1931.

Pines lead the Forest Service's list, being the choice in six states. Spruce, fir, hemlock, and cedar swell the evergreen total. In several instances, the selection is the state's outstanding tree of commerce, past or present, like the white pine of Idaho, Maine, and Minnesota; the shortleaf pine of Arkansas; and Oregon's Douglas fir.

Five States Choose Oaks

Oklahomans, choosing the redbud tree in 1937, recalled that when pioneers in the territory "trekked across its rolling hills and plains, one of the first sights to greet them, spread out in a glorious panorama, was the redbud tree. . . ." With five equally sentimental whereases, Pennsylvanians confirmed the eastern hemlock in 1931.

Connecticut legislators, with their Charter Oak's fame in mind, adopted the white oak only two years ago. Maryland's pride in the gigantic Wye Oak (illustration, next page), which stands across from Annapolis on Chesapeake Bay's eastern shore, motivated state lawmakers' choice of the white oak in 1941. Three other states have chosen various types of oak. Other trees representing at least three states are the maple, cottonwood, and poplar. The elm, strangely enough, has been named by only one state—Massachusetts.

If New York should adopt the red oak, unofficial reign of the hard

trial alcohol, plastics, fabrics, and other substitute materials demanded in Germany's synthetic-products program.

It is only since World War II that Yugoslavia has included a thin slice of Styria in its demands for Austrian territory. This province, lying east and northeast of Carinthia, is about half again as large and more than twice as populous. It continues Carinthia's mountainous character, but is blessed with more fertile soil. Less than one-twelfth of the area of Styria is classed as unproductive. Both Carinthia and Styria are within the British occupation zone of Austria.

NOTE: The border region under dispute between Austria and Yugoslavia may be located on the Society's map of Germany and Its Approaches.

See also, "Austrian August—and September," in the *National Geographic Magazine* for April, 1938; and, in the GEOGRAPHIC SCHOOL BULLETINS, February 4, 1946, "Problem Areas of Europe: Carinthia."

W. ROBERT MOORE

IN A STYRIAN VALLEY, A BUSY AUSTRIAN FAMILY RAKES HAY BEFORE STACKING IT

The dull ghosts hovering in the background are piles of already stacked hay—built around stakes driven into the ground. The farmers of Styria use this small type of haystack so the circulating air will cure the cuttings more readily.

Bulletin No. 5, March 7, 1949

New Zealand Adds to World Volcanic Action

MOUNT Ngauruhoe, one of the several active volcanoes on New Zealand's North Island, recently "blew its top." Rock and lava were hurled an estimated 5,000 feet in the air above the peak's 7,515-foot summit (illustration, next page).

Ngauruhoe has erupted only a few times in the last quarter-century, but its current display adds to an impressive record of volcanic activity over the world in the last two years. In fact, for the 500 or so active volcanoes of the world, business has been booming lately.

Eruptions from Vesuvius to Ruapehu

These safety valves of the furnace-centered earth erupt when internal pressures become too great. The restless earth boils at fantastic temperatures within. But for its volcanoes, it might explode like an overtaxed boiler.

As long as the world's active craters keep busy, there is little danger to the earth as a whole. During or since 1947, more than 60 volcanoes have erupted. Among them were Akutan and Shishaldin in the Aleutians, Gede in western Java, Mayon and Hibokhibok in the Philippines, Asama and Aso in Japan, Hekla in Iceland, San Vincente and Conchagua in El Salvador, Cerro Negro in Nicaragua, and Ruapehu in New Zealand. These were in addition to such periodic performers as Etna, Vesuvius, and Mauna Loa.

Three-fourths or more of the 500 active volcanoes are in the Pacific half of the globe. Most of them are strung around the edge of the Pacific Ocean—along the Andes and North American coastal ridges, the Aleutians, the Kamchatka Peninsula, the Kuril Islands, Japan, the Philippines, New Guinea, the Solomons, New Hebrides, and New Zealand.

Branching westward from New Guinea is the extremely active Java-Sumatra chain. Forming a pendant southward from Tokyo is the 1,000-mile chain of volcanoes through Iwo Jima and the Marianas to Guam.

When Lava "Cork" Blows, Look out!

There are 40 or more active volcanoes under the American flag in Alaska and Hawaii. In the United States proper only Mt. Lassen, 10,453 feet high, in northeastern California, has erupted within the white man's time. It was active from May, 1914, to June, 1917. Oregon's scenic Crater Lake, in the crater of ancient Mt. Mazama, revealed minor signs of undersurface activity in 1945.

Explosions that pour through the throats of volcanoes usually are catastrophic only when hardened lava has formed a seal over the crater mouth. A volcano long considered dormant or dead finally builds up pressure terrific enough to blow off the "cork," throwing rocks, ashes, gas, and steam far in the air and rolling molten lava down the mountain side. In this class belong Krakatau, just west of Java, and Pelée, on Martinique, whose sudden outbursts were among the most terrible in history.

Volcanoes like Mauna Loa in Hawaii have their lava always in liquid

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maple will end in the Empire State. Apple, peach, and orange trees, by providing their blossoms as the state flowers of Arkansas, Delaware, and Florida, respectively, share honors with the state trees—shortleaf pine, American holly, and palm.

In Louisiana and Mississippi, the magnolia is both state tree and state flower. Hawthorn has the dual role in Missouri, apple in Michigan. Maine, with similar consistency, is the Pine Tree State, with the white pine as its tree, and the white pine cone and tassel as its flower.

The pine tree, familiar on early flags and coins of New England, dominates the state seal of Vermont, but the hard maple is the generally recognized state tree. Nebraska officially adopted the name Tree Planters State in 1895, but has yet to make the cottonwood, or any other tree, its legally chosen representative.

NOTE: For additional information on the trees of the United States, see "Forest Lookout," in the *National Geographic Magazine* for July, 1946; and "California's Coastal Redwood Realm," February, 1939 *.

MARYLAND STATE DEPARTMENT OF FORESTRY

WYE OAK, SPREADING OVER TWO FRONT LAWNS IN WYE MILLS, MARYLAND, CREATES A KINGDOM OF SHADE FOR CHILDREN'S PLAY

One of the largest white oaks in the United States, this giant influenced the selection of that species as the Maryland state tree. Its limbspread is 165 feet. The trunk measures more than 18 feet in diameter at its base. The tree stands almost 100 feet high.

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state and are in little danger of explosion. Occasionally a brand-new vent in the earth's surface appears, as when the volcano Paracutín (illustration, inside cover) sprouted in a Mexican cornfield.

At Larderello in northern Italy, steam generated by lava heat has been harnessed successfully to create electric power since 1920. In California, Bolivia, Chile, and Japan, attempts to harness underground volcanic power are in process. For centuries the Maoris in New Zealand have used steam vents and hot pools for cooking and washing.

NOTE: Volcanoes and their heights are noted on the Society's World Map.

For additional information, see "Exploring Aleutian Volcanoes," in the *National Geographic Magazine* for October, 1948; "Land of Lakes and Volcanoes," August, 1944 *; "Paricutín, the Cornfield That Grew a Volcano," February, 1944 *; "We Keep House on an Active Volcano," October, 1939; "Hawaii, Then and Now," October, 1938 *; and "Living on a Volcano," July, 1935.

WHERE USUALLY ONLY A WISP OF SMOKE BLOWS, NGAURUHOE SENDS UP A MIGHTY COLUMN

The volcano was restless for some time after its 1934 eruption and continued to explode ash and smoke high into the New Zealand heavens. Recently a similar series of explosions rocked the mountain.